the Committee on Commerce, Science, and Transportation of the Senate on how the Earth science programs of the Administration and the National Oceanic and Atmospheric Administration will be coordinated during the fiscal year following the fiscal year in which the report is transmitted.

- (c) COORDINATION OF TRANSITION PLANNING AND REPORTING.—The Administrator, in conjunction with the Administrator of the National Oceanic and Atmospheric Administration and in consultation with other relevant agencies, shall evaluate relevant Administration science missions for their potential operational capabilities and shall prepare transition plans for the existing and future Earth observing systems found to have potential operational capabilities.
- (d) LIMITATION.—The Administrator shall not transfer any Administration Earth science mission or Earth observing system to the National Oceanic and Atmospheric Administration until the plan required under subsection (c) has been approved by the Administrator and the Administrator of the National Oceanic and Atmospheric Administration and until financial resources have been identified to support the transition or transfer in the President's budget request for the National Oceanic and Atmospheric Administration

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3426.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
60505	42 U.S.C. 16656.	Pub. L. 109–155, title III, §306, Dec. 30, 2005, 119 Stat. 2919.

In subsection (b), the words "beginning with the first fiscal year after the date of enactment of this Act [December 30, 2005]" are omitted as obsolete.

In subsection (b), the words "Committee on Science and Technology" are substituted for "Committee on Science" on authority of Rule X(1)(0) of the Rules of the House of Representatives, adopted by House Resolution No. 6 (110th Congress, January 5, 2007).

§ 60506. Sharing of climate related data

The Administrator shall work to ensure that the Administration's policies on the sharing of climate related data respond to the recommendations of the Government Accountability Office's report on climate change research and data-sharing policies and to the recommendations on the processing, distribution, and archiving of data by the National Academies Earth Science Decadal Survey, "Earth Science and Applications from Space", and other relevant National Academies reports, to enhance and facilitate their availability and widest possible use to ensure public access to accurate and current data on global warming.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3426.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
60506	42 U.S.C. 17825(c).	Pub. L. 110-422, title XI, §1109(c), Oct. 15, 2008, 122 Stat. 4811.

Subtitle VII—Access to Space CHAPTER 701—USE OF SPACE SHUTTLE OR ALTERNATIVES

Sec. 70101.

Recovery of fair value of placing Department of Defense payloads in orbit with space shuttle.

70102. Space shuttle use policy.

70103. Commercial payloads on space shuttle.

§ 70101. Recovery of fair value of placing Department of Defense payloads in orbit with space shuttle

Notwithstanding any other provision of law, or any interagency agreement, the Administrator shall charge such prices as are necessary to recover the fair value of placing Department of Defense payloads into orbit by means of the space shuttle.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3427.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70101	42 U.S.C. 2464.	Pub. L. 97–324, title I, §106(a), Oct. 15, 1982, 96 Stat. 1600.

§ 70102. Space shuttle use policy

- (a) USE POLICY.—
 - (1) IN GENERAL.
 - (A) POLICY.—It shall be the policy of the United States to use the space shuttle—
 - (i) for purposes that require a human presence;
 - (ii) for purposes that require the unique capabilities of the space shuttle; or
 - (iii) when other compelling circumstances exist.
 - (B) DEFINITION OF COMPELLING CIRCUM-STANCES.—In this paragraph, the term "compelling circumstances" includes, but is not limited to, occasions when the Administrator determines, in consultation with the Secretary of Defense and the Secretary of State, that important national security or foreign policy interests would be served by a shuttle launch.
- (2) USING AVAILABLE CARGO SPACE FOR SECONDARY PAYLOADS.—The policy stated in paragraph (1) shall not preclude the use of available cargo space, on a space shuttle mission otherwise consistent with the policy described in paragraph (1), for the purpose of carrying secondary payloads (as defined by the Administrator) that do not require a human presence if such payloads are consistent with the requirements of research, development, demonstration, scientific, commercial, and educational programs authorized by the Administrator.
- (b) ANNUAL REPORT.—At least annually, the Administrator shall submit to Congress a report certifying that the payloads scheduled to be launched on the space shuttle for the next 4 years are consistent with the policy set forth in subsection (a)(1). For each payload scheduled to be launched from the space shuttle that does not

require a human presence, the Administrator shall, in the certified report to Congress, state the specific circumstances that justified the use of the space shuttle. If, during the period between scheduled reports to Congress, any additions are made to the list of certified payloads intended to be launched from the shuttle, the Administrator shall inform Congress of the additions and the reasons therefor within 45 days of the change.

(c) ADMINISTRATION PAYLOADS.—The report described in subsection (b) shall also include those Administration payloads designed solely to fly on the space shuttle which have begun the phase C/D of its development cycle.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3427.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70102(a)	42 U.S.C. 2465a(a).	Pub. L. 101-611, title I, §112(a), (c), (d), Nov. 16, 1990, 104 Stat, 3198, 3199.
	42 U.S.C. 2465a(c). 42 U.S.C. 2465a(d).	1000, 101 2000, 0100, 0100

§ 70103. Commercial payloads on space shuttle

- (a) Definitions.—In this section:
- (1) LAUNCH VEHICLE.—The term "launch vehicle" means any vehicle constructed for the purpose of operating in, or placing a payload in, outer space.
- (2) PAYLOAD.—The term "payload" means an object which a person undertakes to place in outer space by means of a launch vehicle, and includes subcomponents of the launch vehicle specifically designed or adapted for that ob-
- (b) In General.—Commercial payloads may not be accepted for launch as primary payloads on the space shuttle unless the Administrator determines that-
 - (1) the payload requires the unique capabilities of the space shuttle; or
 - (2) launching of the payload on the space shuttle is important for either national security or foreign policy purposes.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3428.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
	42 U.S.C. 2465c. 42 U.S.C. 2465f.	Pub. L. 101-611, title II, §20 Nov. 16, 1990, 104 Sta 3206; Pub. L. 105-303, titl II, §203(2), Oct. 28, 1998, 11 Stat. 2855. Pub. L. 101-611, title II, §20 Nov. 16, 1990, 104 Sta
		3207; Pub. L. 105–303, title II, §203(4), Oct. 28, 1998, 112 Stat. 2855.

In subsection (a), the words "this section" are substituted for "this title", meaning title II of Public Law 101-611, because title II of Public Law 101-611 was previously repealed except for section 201 (a short title provision, classified to 42 U.S.C. 2451 note, in which neither defined term appears) and sections 203 (42 U.S.C. 2465c) and 206 (42 U.S.C. 2465f) of Public Law 101-611, which are restated in this section.

CHAPTER 703—SHUTTLE PRICING POLICY FOR COMMERCIAL AND FOREIGN USERS

Sec.

70301. Congressional findings and declarations.

70302. Purpose, policy, and goals.

70303. Definition of additive cost. 70304.

Duties of Administrator.

§ 70301. Congressional findings and declarations

Congress finds and declares that-

- (1) the Space Transportation System is a vital element of the United States space program, contributing to the United States leadership in space research, technology, and development:
- (2) the Space Transportation System is the primary space launch system for both United States national security and civil government
- (3) the Space Transportation System contributes to the expansion of United States private sector investment and involvement in space and therefore should serve commercial users;
- (4) the availability of the Space Transportation System to foreign users for peaceful purposes is an important means of promoting international cooperative activities in the national interest and in maintaining access to space for activities which enhance the security and welfare of humankind;
- (5) the United States is committed to maintaining world leadership in space transportation;
- (6) making the Space Transportation System fully operational and cost effective in providing routine access to space will maximize the national economic benefits of the system; and
- (7) national goals and the objectives for the Space Transportation System can be furthered by a stable and fair pricing policy for the Space Transportation System.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3428.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70301	42 U.S.C. 2466.	Pub. L. 99–170, title II, §201, Dec. 5, 1985, 99 Stat. 1017.

§ 70302. Purpose, policy, and goals

The purpose of this chapter is to set, for commercial and foreign users, the reimbursement pricing policy for the Space Transportation System that is consistent with the findings included in section 70301 of this title, encourages the full and effective use of space, and is designed to achieve the following goals:

- (1) The preservation of the role of the United States as a leader in space research, technology, and development.
- (2) The efficient and cost effective use of the Space Transportation System.
- (3) The achievement of greatly increased commercial space activity.
- (4) The enhancement of the international competitive position of the United States.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3429.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70302	42 U.S.C. 2466a.	Pub. L. 99–170, title II, §202, Dec. 5, 1985, 99 Stat. 1017.

§ 70303. Definition of additive cost

In this chapter, the term "additive cost" means the average direct and indirect costs to the Administration of providing additional flights of the Space Transportation System beyond the costs associated with those flights necessary to meet the space transportation needs of the United States Government.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3429.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70303	42 U.S.C. 2466b.	Pub. L. 99–170, title II, §203, Dec. 5, 1985, 99 Stat. 1017.

The definition of "Administrator" in section 203(1) of the National Aeronautics and Space Administration Authorization Act of 1986 (Public Law 99–170, 99 Stat. 1017) is omitted as unnecessary because of the definition added by section 10101 of title 51.

§ 70304. Duties of Administrator

(a) ESTABLISHMENT AND IMPLEMENTATION OF REIMBURSEMENT RECOVERY SYSTEM.—The Administrator shall establish and implement a pricing system to recover reimbursement in accordance with the pricing policy under section 70302 of this title from each commercial or foreign user of the Space Transportation System, which, except as provided in subsections (c), (d), and (e), shall include a base price of not less than \$74,000,000 for each flight of the Space Transportation System in 1982 dollars.

(b) REPORTS TO CONGRESS.—Each year the Administrator shall submit to the President of the Senate, the Speaker of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Science and Technology of the House of Representatives a report, transmitted contemporaneously with the annual budget request of the President, which shall inform Congress how the policy goals contained in section 70302 of this title are being furthered by the shuttle price for foreign and commercial users.

(c) REDUCTION OF BASE PRICE.—

(1) AUTHORITY TO REDUCE.—If at any time the Administrator finds that the policy goals contained in section 70302 of this title are not being achieved, the Administrator shall have authority to reduce the base price established in subsection (a) after 45 days following receipt by the President of the Senate, the Speaker of the House of Representatives, the Committee on Commerce, Science, and Transportation of the Senate, and the Committee on Science and Technology of the House of Representatives of a notice by the Administrator containing a description of the proposed reduction together with a full and complete statement of the facts and circumstances which necessitate such proposed reduction.

- (2) MINIMUM PRICE.—In no case shall the minimum price established under paragraph (1) be less than additive cost.
- (d) Low or No-Cost Flights.—The Administrator may set a price lower than the price determined under subsection (a) or (c), or provide no-cost flights, for any commercial or foreign user of the Space Transportation System that is involved in research, development, or demonstration programs with the Administration.
- (e) CUSTOMER INCENTIVES.—Notwithstanding the provisions of subsection (a), the Administrator shall have the authority to offer reasonable customer incentives consistent with the policy goals in section 70302 of this title.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3429.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70304	42 U.S.C. 2466c.	Pub. L. 99–170, title II, §204, Dec. 5, 1985, 99 Stat. 1017; Pub. L. 103–437, §15(c)(5), Nov. 2, 1994, 108 Stat. 4592.

In subsections (b) and (c)(1), the words "Committee on Science and Technology" are substituted for "Committee on Science, Space, and Technology" on authority of section 1(a)(10) of Public Law 104–14 (2 U.S.C. note prec. 21), Rule X(1)(n) of the Rules of the House of Representatives, adopted by House Resolution No. 5 (106th Congress, January 6, 1999), and Rule X(1)(o) of the Rules of the House of Representatives, adopted by House Resolution No. 6 (110th Congress, January 5, 2007).

SECONDARY PAYLOAD CAPABILITY

Pub. L. 109–155, title VI, $\S602$, Dec. 30, 2005, 119 Stat. 2931, provided that:

"(a) IN GENERAL.—In order to provide more routine and affordable access to space for a broad range of scientific payloads, the Administrator is encouraged to provide the capabilities to support secondary payload flight opportunities on United States launch vehicles, or free flyers, for satellites or scientific payloads weighing less than 500 kilograms.

"(b) FEASIBILITY STUDY.—The Administrator shall initiate a feasibility study for designating a National Free Flyer Launch Coordination Center as a means of coordinating, consolidating, and integrating secondary launch capabilities, launch opportunities, and payloads

(c) Assessment.—The feasibility study required by subsection (b) shall include an assessment of the feasibility of integrating a National Free Flyer Launch Coordination Center within the operations and facilities of an existing nonprofit organization such as the Inland Northwest Space Alliance in Missoula, Montana, or a similar entity, and shall include an assessment of the potential utilization of existing launch and launch support facilities and capabilities, including but not limited to those in the States of Montana and New Mexico and their respective contiguous States, and the State of Alaska, for the integration and launch of secondary payloads, including an assessment of the feasibility of establishing cooperative agreements among such facilities, existing or future commercial launch providers, payload developers, and the designated Coordination Center.'

CHAPTER 705—EXPLORATION INITIATIVES

Sec. 70501. 70502

Space shuttle follow-on.

Exploration plan and programs.

70503. Ground-based analog capabilities.

70504. Stepping stone approach to exploration.

70505. Lunar outpost.

Sec.

70506. Exploration technology research.

70507. Technology development.

70508. Robotic or human servicing of spacecraft.

§ 70501. Space shuttle follow-on

(a) POLICY STATEMENT.—It is the policy of the United States to possess the capability for human access to space on a continuous basis.

(b) ANNUAL REPORT.—The Administrator shall transmit an annual report to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate describing the progress being made toward developing the Crew Exploration Vehicle and the Crew Launch Vehicle and the estimated time before they will demonstrate crewed, orbital spaceflight.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3430.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70501(a)	42 U.S.C. 16761(a).	Pub. L. 109–155, title V, §501(a), (b), Dec. 30, 2005, 119 Stat. 2927.
70501(b)	42 U.S.C. 16761(b).	119 Stat. 2927.

In subsection (b), the words "The Administrator shall transmit an annual report" are substituted for "Not later than 180 days after the date of enactment of this Act [December 30, 2005] and annually thereafter, the Administrator shall transmit a report" to eliminate obsolete language.

In subsection (b), the words "Committee on Science and Technology" are substituted for "Committee on Science" on authority of Rule X(1)(0) of the Rules of the House of Representatives, adopted by House Resolution No. 6 (110th Congress, January 5, 2007).

TRANSITION

Pub. L. 110–422, title VI, §613, Oct. 15, 2008, 122 Stat. 4799, provided that:

"(a) DISPOSITION OF SHUTTLE-RELATED ASSETS.—

"(1) IN GENERAL.—Not later than 90 days after the date of enactment of this Act [Oct. 15, 2008], the Administrator [of NASA] shall submit to Congress a plan describing the process for the disposition of the remaining Space Shuttle Orbiters and other Space Shuttle program-related hardware after the retirement of the Space Shuttle fleet.

"(2) PLAN REQUIREMENTS.—The plan submitted under paragraph (1) shall include a description of a process by which educational institutions, science museums, and other appropriate organizations may acquire, through loan or disposal by the Federal Government, Space Shuttle program hardware.

"(3) PROHIBITION ON DISPOSITION BEFORE COMPLETION OF PLAN.—The Administrator shall not dispose of any Space Shuttle program hardware before the plan required by paragraph (1) is submitted to Congress.

"(b) SPACE SHUTTLE TRANSITION LIAISON OFFICE.—

"(1) ESTABLISHMENT.—The Administrator shall develop a plan and establish a Space Shuttle Transition Liaison Office within the Office of Human Capital Management of NASA [National Aeronautics and Space Administration] to assist local communities affected by the termination of the Space Shuttle program in mitigating the negative impacts on such communities caused by such termination. The plan shall define the size of the affected local community that would receive assistance described in paragraph (2)

"(2) MANNER OF ASSISTANCE.—In providing assistance under paragraph (1), the office established under such paragraph shall—

"(A) offer nonfinancial, technical assistance to communities described in such paragraph to assist in the mitigation described in such paragraph; and

"(B) serve as a clearinghouse to assist such communities in identifying services available from other Federal, State, and local agencies to assist in such mitigation.

"(3) TERMINATION OF OFFICE.—The office established under paragraph (1) shall terminate 2 years after the completion of the last Space Shuttle flight.

"(4) SUBMISSION.—Not later than 180 days after the date of enactment of this Act [Oct. 15, 2008], NASA shall provide a copy of the plan required by paragraph (1) to the Congress."

Pub. L. 110-161, div. B, title III, Dec. 26, 2007, 121 Stat. 1919, provided that: "The Administrator of the National Aeronautics and Space Administration shall prepare a strategy for minimizing job losses when the National Aeronautics and Space Administration transitions from the Space Shuttle to a successor human-rated space transport vehicle. This strategy shall include: (1) specific initiatives that the National Aeronautics and Space Administration has undertaken, or plans to undertake, to maximize the utilization of existing civil service and contractor workforces at each of the affected Centers; (2) efforts to equitably distribute tasks and workload between the Centers to mitigate the brunt of job losses being borne by only certain Centers; (3) new workload, tasks, initiatives, and missions being secured for the affected Centers; and (4) overall projections of future civil service and contractor workforce levels at the affected Centers. The Administrator shall transmit this strategy to Congress not later than 90 days after the date of enactment of this Act [Dec. 26. 2007]. The Administrator shall update and transmit to Congress this strategy not less than every six months thereafter until the successor human-rated space transport vehicle is fully operational.

Pub. L. 109-155, title V, §502, Dec. 30, 2005, 119 Stat. 2928, provided that:

"(a) IN GENERAL.—The Administrator [of the National Aeronautics and Space Administration] shall, to the fullest extent possible consistent with a successful development program, use the personnel, capabilities, assets, and infrastructure of the Space Shuttle program in developing the Crew Exploration Vehicle, Crew Launch Vehicle, and a heavy-lift launch vehicle.

"(b) PLAN.—Not later than 180 days after the date of enactment of this Act [Dec. 30, 2005], the Administrator shall transmit to the Committee on Science [now Committee on Science and Technology] of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a plan describing how NASA [National Aeronautics and Space Administration] will proceed with its human space flight programs which at a minimum shall describe—

flight programs, which, at a minimum, shall describe—
"(1) how NASA will deploy personnel from, and use the facilities of, the Space Shuttle program to ensure that the Space Shuttle operates as safely as possible through its final flight and to ensure that personnel and facilities from the Space Shuttle program are used in NASA's exploration programs in accordance with subsection (a);

"(2) the planned number of flights the Space Shuttle will make before its retirement;

"(3) the means, other than the Space Shuttle and the Crew Exploration Vehicle, including commercial vehicles, that may be used to ferry crew and cargo to and from the ISS [International Space Station];

"(4) the intended purpose of lunar missions and the architecture for those missions; and

"(5) the extent to which the Crew Exploration Vehicle will allow for the escape of the crew in an emergency.

"(c) PERSONNEL.—The Administrator shall consult with other appropriate Federal agencies and with NASA contractors and employees to develop a transition plan for any Federal and contractor personnel engaged in the Space Shuttle program who can no longer be retained because of the retirement of the Space

Shuttle. The plan shall include actions to assist Federal and contractor personnel in taking advantage of training, retraining, job placement and relocation programs, and any other actions that NASA will take to assist the employees. The plan shall also describe how the Administrator will ensure that NASA and its contractors will have an appropriate complement of employees to allow for the safest possible use of the Space Shuttle through its final flight. The Administrator shall transmit the plan to the Committee on Science [now Committee on Science and Technology] of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than March 31, 2006."

§ 70502. Exploration plan and programs

The Administrator shall—

- (1) construct an architecture and implementation plan for the Administration's human exploration program that is not critically dependent on the achievement of milestones by fixed dates;
- (2) implement an exploration technology development program to enable lunar human and robotic operations consistent with section 20302(b) of this title, including surface power to use on the Moon and other locations;
- (3) conduct an in-situ resource utilization technology program to develop the capability to use space resources to increase independence from Earth, and sustain exploration beyond low-Earth orbit; and
- (4) pursue aggressively automated rendezvous and docking capabilities that can support the International Space Station and other mission requirements.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3430.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70502	42 U.S.C. 16763.	Pub. L. 109–155, title V, §503, Dec. 30, 2005, 119 Stat. 2929.

§ 70503. Ground-based analog capabilities

- (a) IN GENERAL.—The Administrator may establish a ground-based analog capability in remote United States locations in order to assist in the development of lunar operations, life support, and in-situ resource utilization experience and capabilities.
- (b) ENVIRONMENTAL CHARACTERISTICS.—The Administrator shall select locations for the activities described in subsection (a) that—
 - (1) are regularly accessible;
 - (2) have significant temperature extremes and range; and
 - (3) have access to energy and natural resources (including geothermal, permafrost, volcanic, or other potential resources).
- (c) INVOLVEMENT OF LOCAL POPULATIONS AND PRIVATE SECTOR PARTNERS.—In carrying out this section, the Administrator shall involve local populations, academia, and industrial partners as much as possible to ensure that ground-based benefits and applications are encouraged and developed.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3430.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70503	42 U.S.C. 16764.	Pub. L. 109–155, title V, §504, Dec. 30, 2005, 119 Stat. 2929.

§ 70504. Stepping stone approach to exploration

In order to maximize the cost-effectiveness of the long-term exploration and utilization activities of the United States, the Administrator shall take all necessary steps, including engaging international partners, to ensure that activities in its lunar exploration program shall be designed and implemented in a manner that gives strong consideration to how those activities might also help meet the requirements of future exploration and utilization activities beyond the Moon. The timetable of the lunar phase of the long-term international exploration initiative shall be determined by the availability of funding. However, once an exploration-related project enters its development phase, the Administrator shall seek, to the maximum extent practicable, to complete that project without undue delays.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3431.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70504	42 U.S.C. 17731.	Pub. L. 110–422, title IV, §403, Oct. 15, 2008, 122 Stat. 4789.

§ 70505. Lunar outpost

- (a) ESTABLISHMENT.—As the Administration works toward the establishment of a lunar outpost, the Administration shall make no plans that would require a lunar outpost to be occupied to maintain its viability. Any such outpost shall be operable as a human-tended facility capable of remote or autonomous operation for extended periods.
- (b) DESIGNATION.—The United States portion of the first human-tended outpost established on the surface of the Moon shall be designated the "Neil A. Armstrong Lunar Outpost".

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3431.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70505(a)	42 U.S.C. 17732(a).	Pub. L. 110–422, title IV, § 404(a), (b), Oct. 15, 2008, 122 Stat. 4789.
70505(b)	42 U.S.C. 17732(b).	122 3000. 1109.

§ 70506. Exploration technology research

The Administrator shall carry out a program of long-term exploration-related technology research and development, including such things as in-space propulsion, power systems, life support, and advanced avionics, that is not tied to specific flight projects. The program shall have the funding goal of ensuring that the technology research and development can be completed in a timely manner in order to support the safe, successful, and sustainable exploration of the solar

system. In addition, in order to ensure that the broadest range of innovative concepts and technologies are captured, the long-term technology program shall have the goal of having a significant portion of its funding available for external grants and contracts with universities, research institutions, and industry.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3431.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70506	42 U.S.C. 17733(b).	Pub. L. 110-422, title IV, § 405(b), Oct. 15, 2008, 122 Stat. 4789.

PURPOSE

Pub. L. 110–422, title IV, §405(a), Oct. 15, 2008, 122 Stat. 4789, provided that: "A robust program of long-term exploration-related technology research and development will be essential for the success and sustainability of any enduring initiative of human and robotic exploration of the solar system."

INNOVATIVE TECHNOLOGIES FOR HUMAN SPACE FLIGHT

Pub. L. 106–391, title III, §313, Oct. 30, 2000, 114 Stat. 1594, provided that:

"(a) ESTABLISHMENT OF PROGRAM.—In order to promote a 'faster, cheaper, better' approach to the human exploration and development of space, the Administrator [of the National Aeronautics and Space Administration] shall establish a Human Space Flight Innovative Technologies program of ground-based and spacebased research and development in innovative technologies. The program shall be part of the Technology and Commercialization program.

"(b) AWARDS.—At least 75 percent of the amount appropriated for Technology and Commercialization under section 101(b)(4) [114 Stat. 1581] for any fiscal year shall be awarded through broadly distributed announcements of opportunity that solicit proposals from educational institutions, industry, nonprofit institutions, National Aeronautics and Space Administration Centers, the Jet Propulsion Laboratory, other Federal agencies, and other interested organizations, and that allow partnerships among any combination of those entities, with evaluation, prioritization, and recommendations made by external peer review panels.

"(c) PLAN.—The Administrator shall provide to the Committee on Science [now Committee on Science and Technology] of the House of Representatives and to the Committee on Commerce, Science, and Transportation of the Senate, not later than December 1, 2000, a plan to implement the program established under subsection (a)"

§ 70507. Technology development

The Administrator shall establish an intra-Directorate long-term technology development program for space and Earth science within the Science Mission Directorate for the development of new technology. The program shall be independent of the flight projects under development. The Administration shall have a goal of funding the intra-Directorate technology development program at a level of 5 percent of the total Science Mission Directorate annual budget. The program shall be structured to include competitively awarded grants and contracts.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3431.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70507	42 U.S.C. 17741.	Pub. L. 110–422, title V, §501, Oct. 15, 2008, 122 Stat. 4791.

§ 70508. Robotic or human servicing of spacecraft

The Administrator shall take all necessary steps to ensure that provision is made in the design and construction of all future observatory-class scientific spacecraft intended to be deployed in Earth orbit or at a Lagrangian point in space for robotic or human servicing and repair to the extent practicable and appropriate.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3432.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70508	42 U.S.C. 17742.	Pub. L. 110–422, title V, §502, Oct. 15, 2008, 122 Stat. 4791.

CHAPTER 707—HUMAN SPACE FLIGHT INDEPENDENT INVESTIGATION COMMISSION

Sec.	
70701.	Definitions.

70702. Establishment of Commission.

70703. Tasks of Commission.

70704. Composition of Commission.

70705 Powers of Commission

70706. Public meetings, information, and hearings.

70707. Staff of Commission.

70708. Compensation and travel expenses.

70709. Security clearances for Commission members

and staff.

70710. Reporting requirements and termination.

§ 70701. Definitions

In this chapter:

- (1) COMMISSION.—The term "Commission" means a Commission established under this chanter
- (2) INCIDENT.—The term "incident" means either an accident or a deliberate act.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3432.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70701	42 U.S.C. 16841.	Pub. L. 109–155, title V, §821, Dec. 30, 2005, 119 Stat. 2941.

§ 70702. Establishment of Commission

- (a) ESTABLISHMENT.—The President shall establish an independent, nonpartisan Commission within the executive branch to investigate any incident that results in the loss of—
 - (1) a space shuttle;
 - (2) the International Space Station or its operational viability;
- (3) any other United States space vehicle carrying humans that is owned by the Federal Government or that is being used pursuant to a contract with the Federal Government; or
- (4) a crew member or passenger of any space vehicle described in this subsection.
- (b) DEADLINE FOR ESTABLISHMENT.—The President shall establish a Commission within 7 days after an incident specified in subsection (a).

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3432.)

HISTORICAL	AND	REVISION	Notes

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70702	42 U.S.C. 16842.	Pub. L. 109–155, title V, §822, Dec. 30, 2005, 119 Stat. 2941.

§ 70703. Tasks of Commission

- A Commission established pursuant to this chapter shall, to the extent possible, undertake the following tasks:
 - (1) INVESTIGATION.—Investigate the incident.
 - (2) CAUSE.—Determine the cause of the incident.
 - (3) CONTRIBUTING FACTORS.—Identify all contributing factors to the cause of the incident.
 - (4) RECOMMENDATIONS.—Make recommendations for corrective actions.
 - (5) ADDITIONAL FINDINGS OR RECOMMENDATIONS.—Provide any additional findings or recommendations deemed by the Commission to be important, whether or not they are related to the specific incident under investigation.
- (6) REPORT.—Prepare a report to Congress, the President, and the public.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3432.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70703	42 U.S.C. 16843.	Pub. L. 109–155, title V, §823, Dec. 30, 2005, 119 Stat. 2941.

§ 70704. Composition of Commission

- (a) NUMBER OF COMMISSIONERS.—A Commission established pursuant to this chapter shall consist of 15 members.
- (b) SELECTION.—The members of a Commission shall be chosen in the following manner:
 - (1) APPOINTMENT BY PRESIDENT.—The President shall appoint the members, and shall designate the Chairman and Vice Chairman of the Commission from among its members.
 - (2) LISTS PROVIDED BY LEADERS OF CONGRESS.—The majority leader of the Senate, the minority leader of the Senate, the Speaker of the House of Representatives, and the minority leader of the House of Representatives shall each provide to the President a list of candidates for membership on the Commission. The President may select one of the candidates from each of the 4 lists for membership on the Commission.
 - (3) PROHIBITION REGARDING FEDERAL OFFICERS AND EMPLOYEES AND MEMBERS OF CONGRESS.—No officer or employee of the Federal Government or Member of Congress shall serve as a member of the Commission.
 - (4) PROHIBITION REGARDING CONTRACTORS.— No member of the Commission shall have, or have pending, a contractual relationship with the Administration.
 - (5) PROHIBITION REGARDING CONFLICT OF INTEREST.—The President shall not appoint any individual as a member of a Commission under this section who has a current or former relationship with the Administrator that the

President determines would constitute a conflict of interest.

- (6) EXPERIENCE.—To the extent practicable, the President shall ensure that the members of the Commission include some individuals with experience relative to human carrying spacecraft, as well as some individuals with investigative experience and some individuals with legal experience.
- (7) DIVERSITY.—To the extent practicable, the President shall seek diversity in the membership of the Commission.
- (c) DEADLINE FOR APPOINTMENT.—All members of a Commission established under this chapter shall be appointed no later than 30 days after the incident.
- (d) INITIAL MEETING.—A Commission shall meet and begin operations as soon as practicable.
- (e) SUBSEQUENT MEETINGS.—After its initial meeting, a Commission shall meet upon the call of the Chairman or a majority of its members.
- (f) QUORUM.—Eight members of a Commission shall constitute a quorum.
- (g) VACANCIES.—Any vacancy in a Commission shall not affect its powers, but shall be filled in the same manner in which the original appointment was made.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3433.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70704(a)	42 U.S.C. 16844(a).	Pub. L. 109–155, title V, §824, Dec. 30, 2005, 119 Stat. 2942.
70704(b) 70704(c)	42 U.S.C. 16844(b). 42 U.S.C. 16844(c).	2012.
70704(d) 70704(e)		
(.,	(1st sentence).	
70704(f)	42 U.S.C. 16844(e) (2d sentence).	
70704(g)	42 U.S.C. 16844(e) (last sentence).	

§ 70705. Powers of Commission

- (a) HEARINGS AND EVIDENCE.—A Commission or, on the authority of the Commission, any subcommittee or member thereof, may, for the purpose of carrying out this chapter—
 - (1) hold such hearings and sit and act at such times and places, take such testimony, receive such evidence, administer such oaths; and
 - (2) require, by subpoena or otherwise, the attendance and testimony of such witnesses and the production of such books, records, correspondence, memoranda, papers, and documents
- as the Commission or such designated subcommittee or member may determine advisable.
- (b) CONTRACTING.—A Commission may, to such extent and in such amounts as are provided in appropriation Acts, enter into contracts to enable the Commission to discharge its duties under this chapter.
 - (c) Information From Federal Agencies.—
 - (1) IN GENERAL.—A Commission may secure directly from any executive department, bureau, agency, board, commission, office, independent establishment, or instrumentality of the Government, information, suggestions, es-

timates, and statistics for the purposes of this chapter. Each department, bureau, agency, board, commission, office, independent establishment, or instrumentality shall, to the extent authorized by law, furnish such information, suggestions, estimates, and statistics directly to the Commission, upon request made by the Chairman, the chairman of any subcommittee created by a majority of the Commission, or any member designated by a majority of the Commission.

- (2) RECEIPT, HANDLING, STORAGE, AND DIS-SEMINATION.—Information shall only be received, handled, stored, and disseminated by members of the Commission and its staff consistent with all applicable statutes, regulations, and Executive orders.
- (d) Assistance From Federal Agencies.—
- (1) GENERAL SERVICES ADMINISTRATION.—The Administrator of General Services shall provide to a Commission on a reimbursable basis administrative support and other services for the performance of the Commission's tasks.
- (2) OTHER DEPARTMENTS AND AGENCIES.—In addition to the assistance prescribed in paragraph (1), departments and agencies of the United States may provide to the Commission such services, funds, facilities, staff, and other support services as they may determine advisable and as may be authorized by law.
- (3) ADMINISTRATION ENGINEERING AND SAFETY CENTER.—The Administration Engineering and Safety Center shall provide data and technical support as requested by the Commission.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3433.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70705	42 U.S.C. 16845.	Pub. L. 109–155, title V, §825, Dec. 30, 2005, 119 Stat. 2942.

§ 70706. Public meetings, information, and hearings

- (a) PUBLIC MEETINGS AND RELEASE OF PUBLIC VERSIONS OF REPORTS.—A Commission shall—
 - (1) hold public hearings and meetings to the extent appropriate; and
 - (2) release public versions of the reports required under this chapter.
- (b) Public Hearings.—Any public hearings of a Commission shall be conducted in a manner consistent with the protection of information provided to or developed for or by the Commission as required by any applicable statute, regulation, or Executive order.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3434.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70706	42 U.S.C. 16846.	Pub. L. 109–155, title V, §826, Dec. 30, 2005, 119 Stat. 2943.

§ 70707. Staff of Commission

(a) APPOINTMENT AND COMPENSATION.—The Chairman, in consultation with the Vice Chair-

man, in accordance with rules agreed upon by a Commission, may appoint and fix the compensation of a staff director and such other personnel as may be necessary to enable the Commission to carry out its functions.

- (b) DETAILEES.—Any Federal Government employee, except for an employee of the Administration, may be detailed to a Commission without reimbursement from the Commission, and such detailee shall retain the rights, status, and privileges of his or her regular employment without interruption.
- (c) CONSULTANT SERVICES.—A Commission may procure the services of experts and consultants in accordance with section 3109 of title 5, but at rates not to exceed the daily equivalent of the annual rate of basic pay in effect for positions at level IV of the Executive Schedule under section 5315 of title 5. An expert or consultant whose services are procured under this subsection shall disclose any contract or association the expert or consultant has with the Administration or any Administration contractor.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3435.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70707	42 U.S.C. 16847.	Pub. L. 109–155, title V, § 827, Dec. 30, 2005, 119 Stat. 2943.

In subsection (c), in the 1st sentence, the words "the daily equivalent of the annual rate of basic pay in effect for positions at level IV of the Executive Schedule under section 5315 of title 5" are substituted for "the daily rate paid a person occupying a position at level IV of the Executive Schedule under section 5315 of title 5" for consistency in title 51.

In subsection (c), in the last sentence, the words "the expert or consultant" are substituted for "it" for clarity.

§ 70708. Compensation and travel expenses

- (a) COMPENSATION.—Each member of a Commission may be compensated at a rate not to exceed the daily equivalent of the annual rate of basic pay in effect for positions at level IV of the Executive Schedule under section 5315 of title 5 for each day during which that member is engaged in the actual performance of the duties of the Commission.
- (b) TRAVEL EXPENSES.—While away from their homes or regular places of business in the performance of services for the Commission, members of a Commission shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of title 5.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3435.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70708	42 U.S.C. 16848.	Pub. L. 109–155, title V, §828, Dec. 30, 2005, 119 Stat. 2944.

In subsection (a), the words "at a rate not to exceed the daily equivalent of the annual rate" for "at not to exceed the daily equivalent of the annual rate" for consistency in title 51.

In subsection (b), the words "section 5703 of title 5" are substituted for "section 5703(b) of title 5" to correct an error in the law. Section 5703 of title 5, United States Code, does not contain a subsection (b).

§ 70709. Security clearances for Commission members and staff

The appropriate Federal agencies or departments shall cooperate with a Commission in expeditiously providing to the Commission members and staff appropriate security clearances to the extent possible pursuant to existing procedures and requirements. No person shall be provided with access to classified information under this chapter without the appropriate security clearances.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3435.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70709	42 U.S.C. 16849.	Pub. L. 109–155, title V, § 829, Dec. 30, 2005, 119 Stat. 2944.

§ 70710. Reporting requirements and termination

- (a) Interim Reports.—A Commission may submit to the President and Congress interim reports containing such findings, conclusions, and recommendations for corrective actions as have been agreed to by a majority of Commission members.
- (b) FINAL REPORT.—A Commission shall submit to the President and Congress, and make concurrently available to the public, a final report containing such findings, conclusions, and recommendations for corrective actions as have been agreed to by a majority of Commission members. Such report shall include any minority views or opinions not reflected in the majority report.

 - (c) TERMINATION.—
 (1) IN GENERAL.—A Commission, and all the authorities of this chapter with respect to that Commission, shall terminate 60 days after the date on which the final report is submitted under subsection (b).
 - (2) Administrative activities before termi-NATION.—A Commission may use the 60-day period referred to in paragraph (1) for the purpose of concluding its activities, including providing testimony to committees of Congress concerning its reports and disseminating the final report.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3436.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70710	42 U.S.C. 16850.	Pub. L. 109–155, title V, §830, Dec. 30, 2005, 119 Stat. 2944.

CHAPTER 709—INTERNATIONAL SPACE **STATION**

70901 Peaceful uses of space station.

Allocation of International Space Station research budget.

Sec.

70903. International Space Station research. 70904 International Space Station completion.

70905. National laboratory designation. 70906.

International Space Station National Laboratory Advisory Committee.

70907. Maintaining use through at least 2020.

§ 70901. Peaceful uses of space station

No civil space station authorized under section 103(a)(1) of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1991 (Public Law 101-611, 104 Stat. 3190) may be used to carry or place in orbit any nuclear weapon or any other weapon of mass destruction, to install any such weapon on any celestial body, or to station any such weapon in space in any other manner. This civil space station may be used only for peaceful purposes.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3436.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70901	(not previously classified)	Pub. L. 101–611, title I, §123, Nov. 16, 1990, 104 Stat. 3204.

The words "the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1991 (Public Law 101-611, 104 Stat. 3190)" are substituted for "this Act" to clarify the reference.

References in Text

Section 103(a)(1) of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1991 (Public Law 101-611, 104 Stat. 3190), referred to in text, is not classified to the Code.

INTERNATIONAL SPACE STATION

Pub. L. 110-69, title II, §2006, Aug. 9, 2007, 121 Stat. 584, provided that:

"(a) SENSE OF CONGRESS.—It is the sense of Congress that the International Space Station National Laboratory offers unique opportunities for educational activities and provides a unique resource for research and development in science, technology, and engineering, which can enhance the global competitiveness of the United States.

(b) DEVELOPMENT OF EDUCATIONAL PROJECTS.—The Administrator of the National Aeronautics and Space Administration shall develop a detailed plan for implementation of 1 or more education projects that utilize the resources offered by the International Space Station. In developing any detailed plan according to this paragraph, the Administrator shall make use of the findings and recommendations of the International Space Station National Laboratory Education Concept Development Task Force.

"(c) DEVELOPMENT OF RESEARCH PLANS FOR COMPETI-TIVENESS ENHANCEMENT.—The Administrator shall develop a detailed plan for identification and support of research to be conducted aboard the International Space Station, which offers the potential for enhancement of United States competitiveness in science, technology, and engineering. In developing any detailed plan pursuant to this subsection, the Administrator shall consult with agencies and entities with which cooperative agreements have been reached regarding utilization of International Space Station National Laboratory facilities."

Pub. L. 106-391, title II, §§ 201-203, 205, Oct. 30, 2000, 114 Stat. 1586–1590, as amended by Pub. L. 108–271, §8(b), July 7, 2004, 118 Stat. 814; Pub. L. 109–155, title II, §207(b), title VII, §706(a), Dec. 30, 2005, 119 Stat. 2916, 2937, provided that:

"SEC. 201. INTERNATIONAL SPACE STATION CONTINGENCY PLAN.

"(a) BIMONTHLY REPORTING ON RUSSIAN STATUS.—Not later than the first day of the first month beginning more than 60 days after the date of the enactment of this Act [Oct. 30, 2000], and semiannually thereafter until December 31, 2011, the Administrator [of the National Aeronautics and Space Administration] shall report to Congress whether or not the Russians have performed work expected of them and necessary to complete the International Space Station. Each such report shall also include a statement of the Administrator's judgment concerning Russia's ability to perform work anticipated and required to complete the International Space Station before the next report under this subsection. Each such report shall also identify each Russian entity or person to whom NASA has, since the date of the enactment of the Iran Nonproliferation Amendments Act of 2005 [Nov. 22, 2005], made a payment in cash or in-kind for work to be performed or services to be rendered under the Agreement Concerning Cooperation on the Civil International Space Station, with annex, signed at Washington January 29, 1998, and entered into force March 27, 2001, or any protocol, agreement, memorandum of understanding, or contract related thereto. Each report shall include the specific purpose of each payment made to each entity or person identified in the report.

"(b) DECISION ON RUSSIAN CRITICAL PATH ITEMS.—The President shall notify Congress within 90 days after the date of the enactment of this Act [Oct. 30, 2000] of the decision on whether or not to proceed with permanent replacement of any Russian elements in the critical path [as defined in section 3 of Pub. L. 106-391, 51 U.S.C. 10101 note] of the International Space Station or any Russian launch services. Such notification shall include the reasons and justifications for the decision and the costs associated with the decision. Such decision shall include a judgment of when all elements identified in Revision E assembly sequence as of June 1999 will be in orbit and operational. If the President decides to proceed with a permanent replacement for any Russian element in the critical path or any Russian launch services, the President shall notify Congress of the reasons and the justification for the decision to proceed with the permanent replacement and the costs associated with the decision.

"(c) ASSURANCES.—The United States shall seek assurances from the Russian Government that it places a higher priority on fulfilling its commitments to the International Space Station than it places on extending the life of the Mir Space Station, including assurances that Russia will not utilize assets allocated by Russia to the International Space Station for other purposes, including extending the life of Mir.

"(d) EQUITABLE UTILIZATION.—In the event that any International Partner in the International Space Station Program willfully violates any of its commitments or agreements for the provision of agreed-upon Space Station-related hardware or related goods or services, the Administrator should, in a manner consistent with relevant international agreements, seek a commensurate reduction in the utilization rights of that Partner until such time as the violated commitments or agreements have been fulfilled.

"(e) OPERATION COSTS.—The Administrator shall, in a manner consistent with relevant international agreements, seek to reduce the National Aeronautics and Space Administration's share of International Space Station common operating costs, based upon any additional capabilities provided to the International Space Station through the National Aeronautics and Space Administration's Russian Program Assurance activities

"[SEC. 202. Repealed. Pub. L. 109-155, title II, §207(b), Dec. 30, 2005, 119 Stat. 2916, effective 30 days after Dec. 1, 2006.]

"SEC. 203. RESEARCH ON INTERNATIONAL SPACE STATION.

"(a) STUDY.—The Administrator [of the National Aeronautics and Space Administration] shall enter into a contract with the National Research Council and the National Academy of Public Administration to jointly conduct a study of the status of life and microgravity research as it relates to the International Space Station. The study shall include—

"(1) an assessment of the United States scientific community's readiness to use the International Space Station for life and microgravity research;

"(2) an assessment of the current and projected factors limiting the United States scientific community's ability to maximize the research potential of the International Space Station, including, but not limited to, the past and present availability of resources in the life and microgravity research accounts within the Office of Human Spaceflight and the Office of Life and Microgravity Sciences and Applications and the past, present, and projected access to space of the scientific community; and

"(3) recommendations for improving the United States scientific community's ability to maximize the research potential of the International Space Station, including an assessment of the relative costs and benefits of—

"(A) dedicating an annual mission of the Space Shuttle to life and microgravity research during assembly of the International Space Station; and

"(B) maintaining the schedule for assembly in place at the time of the enactment [Oct. 30, 2000].

"(b) REPORT.—Not later than 1 year after the date of the enactment of this Act [Oct. 30, 2000], the Administrator shall transmit to the Committee on Science [now Committee on Science and Technology] of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the results of the study conducted under this section.

"SEC. 205. SPACE STATION RESEARCH UTILIZATION AND COMMERCIALIZATION MANAGEMENT.

"(a) RESEARCH UTILIZATION AND COMMERCIALIZATION MANAGEMENT ACTIVITIES.—The Administrator of the National Aeronautics and Space Administration shall enter into an agreement with a non-government organization to conduct research utilization and commercialization management activities of the International Space Station subsequent to substantial completion as defined in section 202(b)(3). The agreement may not take effect less than 120 days after the implementation plan for the agreement is submitted to the Congress under subsection (b).

"(b) IMPLEMENTATION PLAN.—Not later than September 30, 2001, the Administrator shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science [now Committee on Science and Technology] of the House of Representatives an implementation plan to incorporate the use of a non-government organization for the International Space Station. The implementation plan shall include—

"(1) a description of the respective roles and responsibilities of the Administration and the non-government organization:

"(2) a proposed structure for the non-government organization;

"(3) a statement of the resources required:

"(4) a schedule for the transition of responsibilities;

"(5) a statement of the duration of the agreement." [Pub. L. 109-155, title VII, \$706(a)(2), Dec. 30, 2005, 119 Stat. 2937, which directed insertion of two sentences at end of section 201 of Pub. L. 106-391, set out above, was

executed by making the insertion at the end of section 201(a) of Pub. L. 106-391, to reflect the probable intent of Congress.

PERMANENTLY MANNED SPACE STATION

Pub. L. 100–147, title I, §§106–112, Oct. 30, 1987, 101 Stat. 863–865, as amended by Pub. L. 102–195, §16, Dec. 9, 1991, 105 Stat. 1614; Pub. L. 105–362, title XI, §1101(c), Nov. 10, 1998, 112 Stat. 3292, provided that:

"SEC. 106. (a) The Administrator [of the National Aeronautics and Space Administration] is directed to undertake the construction of a permanently manned space station (hereinafter referred to as the 'space station') to become operational in 1995. The space station will be used for the following purposes—

"(1) the conduct of scientific experiments, applications experiments, and engineering experiments;

"(2) the servicing, rehabilitation, and construction of satellites and space vehicles;

"(3) the development and demonstration of commercial products and processes; and

"(4) the establishment of a space base for other civilian and commercial space activities.

"(b) The space station shall be developed and operated in a manner that supports other science and space activities.

"(c) In order to reduce the cost of operations of the space station and its ground support system, the Administrator shall undertake the development of such advanced technologies as may be appropriate within the level of funding authorized in this Act [see Tables for classification].

"(d) The Administrator shall seek to have portions of the space station constructed and operated by the private sector, where appropriate.

"(e) The Administrator shall promote international cooperation in the space station program by undertaking the development, construction, and operation of the space station in conjunction with (but not limited to) the Governments of Furone, Japan, and Canada

to) the Governments of Europe, Japan, and Canada. "(f) The space station shall be designed, developed, and operated in a manner that enables evolutionary enhancement.

"[SEC. 107. Repealed. Pub. L. 105-362, title XI, §1101(c), Nov. 10, 1998, 112 Stat. 3292.]

"SEC. 108. In order to ensure that the development of the space station is part of a balanced civilian space program, the Administrator is instructed to establish as a goal a funding profile that limits (1) space station total annual costs under the capital development plan in section 107 to 25 percent of the total budget request for the National Aeronautics and Space Administration and (2) all space station direct operations costs, except for those costs associated with the utilization of the space station, to 10 percent of the total budget request for the National Aeronautics and Space Administration

"SEC. 109. (a) It is the sense of the Congress that the launching and servicing of the space station should be accomplished by the most cost-effective use of space transportation systems, including the space shuttle and expendable launch vehicles.

"(b) Not later than January 15, 1988, the Administrator shall submit a preliminary report on the cost-effective use of space transportation systems for the launch of space station elements during the development and operation of the space station. The Administrator shall consider—

"(1) the potential use of future advanced or heavy lift expendable launch vehicles for purposes of the assembly and operation of the space station;

"(2) the use of existing expendable launch vehicles of the National Aeronautics and Space Administration, the Department of Defense, and the Private Sector."

tor;
"(3) the requirement for space shuttle launches; and
"(4) the risk of capital losses from the use of expendable launch vehicles and the space shuttle.

"SEC. 110. (a) The Administrator shall set and collect reasonable user fees for the use and maintenance of the space station.

"(b) The Administrator shall set user fees so as to—
"(1) promote the use of the space station consistent with the policy set forth in section 106;

"(2) recover the costs of the use of the space station, including reasonable charges for any enhancement needed for such use: and

"(3) conserve and efficiently allocate the resources of the space station.

"(c) The Administrator may, on a case-by-case basis, waive or modify such user fees when in the Administrator's judgment such waiver or modification will further the goals and purposes of the National Aeronautics and Space Act of 1958 [see 51 U.S.C. 20101 et seq.], including—

"(1) the advancement of scientific or engineering knowledge;

"(2) international cooperation; and

"(3) the commercial use of space.

"SEC. 111. No later than September 30, 1988, the Administrator shall submit a detailed plan for collecting reimbursements for the utilization of the space station under section 110, including the services to be offered, the methodology and bases by which prices will be charged, and the estimated revenues.

"Sec. 112. The Intergovernmental Agreement currently being negotiated between the United States Government and Canada, Japan, and member governments of the European Space Agency, and the Memorandum of Understanding currently being negotiated between the National Aeronautics and Space Administration and its counterpart agencies in Canada, Japan, and Europe concerning the detailed design, development, construction, operation, or utilization of the space station shall be submitted to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology [now Committee on Science and Technology] of the House of Representatives. No such agreement shall take effect until 30 days have passed after the receipt by such committees of the agreement."

§ 70902. Allocation of International Space Station research budget

The Administrator shall allocate at least 15 percent of the funds budgeted for International Space Station research to ground-based, free-flyer, and International Space Station life and microgravity science research that is not directly related to supporting the human exploration program, consistent with section 40904 of this title.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3436.) HISTORICAL AND REVISION NOTES

 Revised Section
 Source (U.S. Code)
 Source (Statutes at Large)

 70902
 42 U.S.C. 16633.
 Pub. L. 109–155, title II, §204, Dec. 30, 2005, 119 Stat.

2916

The words "Beginning with fiscal year 2006", which appeared at the beginning of this section, are omitted as obsolete.

§ 70903. International Space Station research

The Administrator shall-

(1) carry out a program of microgravity research consistent with section 40904 of this title; and

(2) consider the need for a life sciences centrifuge and any associated holding facilities.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3436.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70903	42 U.S.C. 16766(1), (2).	Pub. L. 109–155, title V, §506(1), (2), Dec. 30, 2005, 119 Stat. 2930

§ 70904. International Space Station completion

- (a) POLICY.—It is the policy of the United States to achieve diverse and growing utilization of, and benefits from, the International Space Station.
- (b) ELEMENTS, CAPABILITIES, AND CONFIGURATION CRITERIA.—The Administrator shall ensure that the International Space Station will—
 - (1) be assembled and operated in a manner that fulfills international partner agreements, as long as the Administrator determines that the shuttle can safely enable the United States to do so;
 - (2) be used for a diverse range of microgravity research, including fundamental, applied, and commercial research, consistent with section 40904 of this title;
 - (3) have an ability to support a crew size of at least 6 persons, unless the Administrator transmits to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than 60 days after December 30, 2005, a report explaining why such a requirement should not be met, the impact of not meeting the requirement on the International Space Station research agenda and operations and international partner agreements, and what additional funding or other steps would be required to have an ability to support a crew size of at least 6 persons;
 - (4) support Crew Exploration Vehicle docking and automated docking of cargo vehicles or modules launched by either heavy-lift or commercially-developed launch vehicles;
 - (5) support any diagnostic human research, on-orbit characterization of molecular crystal growth, cellular research, and other research that the Administration believes is necessary to conduct, but for which the Administration lacks the capacity to return the materials that need to be analyzed to Earth; and
 - (6) be operated at an appropriate risk level.
 - (c) CONTINGENCIES.—
 - (1) POLICY.—The Administrator shall ensure that the International Space Station can have available, if needed, sufficient logistics and on-orbit capabilities to support any potential period during which the space shuttle or its follow-on crew and cargo systems are unavailable, and can have available, if needed, sufficient surge delivery capability or prepositioning of spares and other supplies needed to accommodate any such hiatus.
 - (2) PLAN.—Before making any change in the International Space Station assembly sequence in effect on December 30, 2005, the Administrator shall transmit to the Committee on Science and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a plan to carry out the policy described in paragraph (1).

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3437.)

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70904	42 U.S.C. 16765.	Pub. L. 109–155, title V, §505, Dec. 30, 2005, 119 Stat. 2929.

In subsections (b)(3) and (c)(2), the words "Committee on Science and Technology" are substituted for "Committee on Science" on authority of Rule X(1)(o) of the Rules of the House of Representatives, adopted by House Resolution No. 6 (110th Congress, January 5, 2007)

In subsections (b)(3) and (c)(2), the date "December 30, 2005" is substituted for "the date of enactment of this Act" to reflect the date of enactment of the National Aeronautics and Space Administration Authorization Act of 2005 (Public Law 109-155, 119 Stat. 2895). In subsection (c)(2) the words "Not later than 60 days

In subsection (c)(2) the words "Not later than 60 days after the date of enactment of this Act [December 30, 2005], and" are omitted as obsolete.

§ 70905. National laboratory designation

- (a) DEFINITION OF UNITED STATES SEGMENT OF THE INTERNATIONAL SPACE STATION.—In this section the term "United States segment of the International Space Station" means those elements of the International Space Station manufactured—
 - (1) by the United States; or
 - (2) for the United States by other nations in exchange for funds or launch services.
- (b) DESIGNATION.—To further the policy described in section 70501(a) of this title, the United States segment of the International Space Station is hereby designated a national laboratory.
 - (c) Management.—
 - (1) Partnerships.—The Administrator shall seek to increase the utilization of the International Space Station by other Federal entities and the private sector through partnerships, cost-sharing agreements, and other arrangements that would supplement Administration funding of the International Space Station.
 - (2) CONTRACTING.—The Administrator may enter into a contract with a nongovernmental entity to operate the International Space Station national laboratory, subject to all applicable Federal laws and regulations.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3437.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70905(a)	42 U.S.C. 16767(d).	Pub. L. 109–155, title V, § 507(a), (b), (d), Dec. 30, 2005, 119 Stat. 2930, 2931.
70905(b) 70905(c)	42 U.S.C. 16767(a). 42 U.S.C. 16767(b).	2000, 110 8000. 2000, 2001.

§ 70906. International Space Station National Laboratory Advisory Committee

(a) ESTABLISHMENT.—Not later than one year after October 15, 2008, the Administrator shall establish under the Federal Advisory Committee Act a committee to be known as the "International Space Station National Laboratory Advisory Committee" (hereafter in this section referred to as the "Committee").

(b) Membership.—

- (1) COMPOSITION.—The Committee shall be composed of individuals representing organizations that have formal agreements with the Administration to utilize the United States portion of the International Space Station, including allocations within partner elements.
- (2) CHAIR.—The Administrator shall appoint a chair from among the members of the Committee, who shall serve for a 2-year term.

(c) DUTIES OF THE COMMITTEE.—

- (1) IN GENERAL.—The Committee shall monitor, assess, and make recommendations regarding effective utilization of the International Space Station as a national laboratory and platform for research.
- (2) ANNUAL REPORT.—The Committee shall submit to the Administrator, on an annual basis or more frequently as considered necessary by a majority of the members of the Committee, a report containing the assessments and recommendations required by paragraph (1).
- (d) DURATION.—The Committee shall exist for the life of the International Space Station.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3438.)

HISTORICAL AND REVISION NOTES

-	Revised Section	Source (U.S. Code)	Source (Statutes at Large)
	70906	42 U.S.C. 17752.	Pub. L. 110–422, title VI, § 602, Oct. 15, 2008, 122 Stat. 4795.

In subsection (a), the date "October 15, 2008" is substituted for "the date of enactment of this Act" to reflect the date of enactment of the National Aeronautics and Space Administration Authorization Act of 2008 (Public Law 110-422, 122 Stat. 4779).

References in Text

The Federal Advisory Committee Act, referred to in subsec. (a), is Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, which is set out in the Appendix to Title 5, Government Organization and Employees.

§ 70907. Maintaining use through at least 2020

The Administrator shall take all necessary steps to ensure that the International Space Station remains a viable and productive facility capable of potential United States utilization through at least 2020 and shall take no steps that would preclude its continued operation and utilization by the United States after 2015.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3438.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
70907	42 U.S.C. 17751(a).	Pub. L. 110–422, title VI, § 601(a), Oct. 15, 2008, 122 Stat. 4793.

CHAPTER 711—NEAR-EARTH OBJECTS

71101. Reaffirmation of policy.

71102. Requests for information.

71103. Developing policy and recommending respon-

sible Federal agency.

71104. Planetary radar. GEORGE E. BROWN, JR. NEAR-EARTH OBJECT SURVEY

Pub. L. 109-155, title III, §321, Dec. 30, 2005, 119 Stat. 2922, provided that:

- "(a) SHORT TITLE.—This section may be cited as the 'George E. Brown, Jr. Near-Earth Object Survey Act'.
 "(b) FINDINGS.—The Congress makes the following
- findings:
 - "(1) Near-Earth objects pose a serious and credible threat to humankind, as many scientists believe that a major asteroid or comet was responsible for the mass extinction of the majority of the Earth's species, including the dinosaurs, nearly 65,000,000 years ago.
 - "(2) Similar objects have struck the Earth or passed through the Earth's atmosphere several times in the Earth's history and pose a similar threat in the future.
 - "(3) Several such near-Earth objects have only been discovered within days of the objects' closest approach to Earth, and recent discoveries of such large objects indicate that many large near-Earth objects remain undiscovered.
 - "(4) The efforts taken to date by NASA [National Aeronautics and Space Administration] for detecting and characterizing the hazards of near-Earth objects are not sufficient to fully determine the threat posed by such objects to cause widespread destruction and loss of life.
- $\lq\lq(c)$ Definitions.—For purposes of this section the term 'near-Earth object' means an asteroid or comet with a perihelion distance of less than 1.3 Astronomical Units from the Sun.
 - '(d) NEAR-EARTH OBJECT SURVEY.—
 - "(1) SURVEY PROGRAM.—The Administrator [of the National Aeronautics and Space Administration] shall plan, develop, and implement a Near-Earth Object Survey program to detect, track, catalogue, and characterize the physical characteristics of near-Earth objects equal to or greater than 140 meters in diameter in order to assess the threat of such near-Earth objects to the Earth. It shall be the goal of the Survey program to achieve 90 percent completion of its near-Earth object catalogue (based on statistically predicted populations of near-Earth objects) within 15 years after the date of enactment of this Act [Dec. 30, 2005].
 - "(2) [Amended former section 2451 of Title 42, The Public Health and Welfare.]
 - "(3) FIFTH-YEAR REPORT.—The Administrator shall transmit to the Congress, not later than February 28 of the fifth year after the date of enactment of this Act, a report that provides the following:
 - "(A) A summary of all activities taken pursuant to paragraph (1) since the date of enactment of this Act.
 - "(B) A summary of expenditures for all activities pursuant to paragraph (1) since the date of enactment of this Act.
 - "(4) INITIAL REPORT.—The Administrator shall transmit to Congress not later than 1 year after the date of enactment of this Act an initial report that provides the following:
 - "(A) An analysis of possible alternatives that NASA may employ to carry out the Survey program, including ground-based and space-based alternatives with technical descriptions.
 - "(B) A recommended option and proposed budget to carry out the Survey program pursuant to the recommended option.
 - "(C) Analysis of possible alternatives that NASA could employ to divert an object on a likely collision course with Earth.

§71101. Reaffirmation of policy

Congress reaffirms the policy set forth in section 20102(g) of this title (relating to surveying near-Earth asteroids and comets).

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
71101	42 U.S.C. 17791(a).	Pub. L. 110-422, title VIII, §801(a), Oct. 15, 2008, 122 Stat. 4803.

FINDINGS

Pub. L. 110-422, title VIII, §802, Oct. 15, 2008, 122 Stat. 4803, provided that: "Congress makes the following findings:

"(1) Near-Earth objects pose a serious and credible threat to humankind, as many scientists believe that a major asteroid or comet was responsible for the mass extinction of the majority of the Earth's species, including the dinosaurs, nearly 65,000,000 years ago.

ago.

"(2) Several such near-Earth objects have only been discovered within days of the objects' closest approach to Earth and recent discoveries of such large objects indicate that many large near-Earth objects remain undiscovered.

 $\lq\lq(3)$ Asteroid and comet collisions rank as one of the most costly natural disasters that can occur.

"(4) The time needed to eliminate or mitigate the threat of a collision of a potentially hazardous near-Earth object with Earth is measured in decades.

"(5) Unlike earthquakes and hurricanes, asteroids and comets can provide adequate collision information, enabling the United States to include both asteroid-collision and comet-collision disaster recovery and disaster avoidance in its public-safety structure.

"(6) Basic information is needed for technical and policy decisionmaking for the United States to create a comprehensive program in order to be ready to eliminate and mitigate the serious and credible threats to humankind posed by potentially hazardous near-Earth asteroids and comets.

"(7) As a first step to eliminate and to mitigate the risk of such collisions, situation and decision analysis processes, as well as procedures and system resources, must be in place well before a collision threat becomes known."

§ 71102. Requests for information

The Administrator shall issue requests for information on—

(1) a low-cost space mission with the purpose of rendezvousing with, attaching a tracking device, 1 and characterizing the Apophis asteroid; and

(2) a medium-sized space mission with the purpose of detecting near-Earth objects equal to or greater than 140 meters in diameter.

(Pub. L. 111–314, §3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
71102	42 U.S.C. 17793.	Pub. L. 110–422, title VIII, § 803, Oct. 15, 2008, 122 Stat. 4803.

§ 71103. Developing policy and recommending responsible Federal agency

Within 2 years after October 15, 2008, the Director of the Office of Science and Technology Policy shall—

(1) develop a policy for notifying Federal agencies and relevant emergency response institutions of an impending near-Earth object

threat, if near-term public safety is at risk;

(2) recommend a Federal agency or agencies to be responsible for—

(A) protecting the United States from a near-Earth object that is expected to collide with Earth; and

(B) implementing a deflection campaign, in consultation with international bodies, should one be necessary.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
71103	42 U.S.C. 17794.	Pub. L. 110–422, title VIII, §804, Oct. 15, 2008, 122 Stat. 4804.

In the matter before paragraph (1), the date "October 15, 2008" is substituted for "the date of enactment of this Act" to reflect the date of enactment of the National Aeronautics and Space Administration Authorization Act of 2008.

§ 71104. Planetary radar

The Administrator shall maintain a planetary radar that is comparable to the capability provided through the Deep Space Network Goldstone facility of the Administration.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
71104	42 U.S.C. 17795.	Pub. L. 110-422, title VIII, §805, Oct. 15, 2008, 122 Stat. 4804.

CHAPTER 713—COOPERATION FOR SAFETY AMONG SPACEFARING NATIONS

Sec

71301. Common docking system standard to enable rescue.

71302. Information sharing to avoid physical or radio-frequency interference.

§ 71301. Common docking system standard to enable rescue

In order to maximize the ability to rescue astronauts whose space vehicles have become disabled, the Administrator shall enter into discussions with the appropriate representatives of spacefaring nations who have or plan to have crew transportation systems capable of orbital flight or flight beyond low Earth orbit for the purpose of agreeing on a common docking system standard.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3439.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
71301	42 U.S.C. 17734.	Pub. L. 110–422, title IV, § 407, Oct. 15, 2008, 122 Stat. 4790.

§ 71302. Information sharing to avoid physical or radio-frequency interference

The Administrator shall, in consultation with other agencies of the Federal Government as the

 $^{^{1}\}mathrm{So}$ in original. The comma probably should be preceded by "to".

Administrator considers appropriate, initiate discussions with the appropriate representatives of spacefaring nations to determine an appropriate frame-work under which information intended to promote safe access into outer space, operations in outer space, and return from outer space to Earth free from physical or radio-frequency interference can be shared among the nations.

(Pub. L. 111-314, §3, Dec. 18, 2010, 124 Stat. 3440.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
71302	42 U.S.C. 17821(b).	Pub. L. 110-422, title XI, §1102(b), Oct. 15, 2008, 122 Stat. 4808.

FINDING

Pub. L. 110-422, title XI, §1102(a), Oct. 15, 2008, 122 Stat. 4808, provided that: "Congress finds that as more countries acquire the capability for launching payloads into outer space, there is an increasing need for a framework under which information intended to promote safe access into outer space, operations in outer space, and return from outer space to Earth free from physical or radio-frequency interference can be shared among those countries."